

Serial Nr.: 10/772,933
Art Unit: 2821

04117-URS

AMENDMENTS TO THE CLAIMS:

1-3. (Cancelled).

4. (New) A control circuit of an electronic ballast for a fluorescent lamp which comprises a first filament with two ends connected to output terminals P7 and P8 of the electronic ballast, and a second filament with two ends connected to output terminals P3 and P4 of the electronic ballast, the electronic ballast comprising a capacitor C10 connected between the output terminals P7 and P4, a filter and rectifier circuit providing a DC voltage positive output and a ground, a half bridge oscillation circuit mainly formed by two transistors Q1 and Q2 for generating a high voltage output to the output terminal P8, and a driving transformer with a primary winding T1A and two secondary windings T1B and T1C, the primary winding T1A having a first end connected to the output terminal P3 and a second end connected to the ground, the secondary winding T1B having a first end driving the transistor Q1 and a second end connected to a resistor R1 which is connected to the DC voltage positive output through a resistor R5, the secondary winding T1C having a first end driving the transistor Q2 and a second end connected to the ground, the control circuit comprising:

a protection circuit for preventing the half bridge oscillation circuit of the electronic ballast from generating an abnormal high AC voltage when the fluorescent lamp is defective, the protection circuit including a capacitor C11 having a first end connected to the output terminal P8 and a second end connected to an anode of a diode D12 and a resistor R8 which is connected to the ground, a resistor R9 having a first end connected to a cathode of the diode D12 and a second end connected to a

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cathode of a Zener diode D13, a capacitor C12 in parallel with a resistor R10 connecting the cathode of the Zener diode D13 to the ground, a capacitor C13 connecting an anode of the Zener diode D13 to the ground, a SCR thyristor TH1 having a gate connected to the anode of the Zener diode D13, a cathode connected to the ground and an anode connected to a junction between the resistor R1 and the resistor R5, and a diode D11 having an anode connected to the output terminal P3 and a cathode connected to the anode of the SCR thyristor TH1; and

an automatic re-lamp circuit for lighting a newly-installed fluorescent lamp without switching off and on a supplying power of the control circuit, the automatic re-lamp circuit including a resistor R11 having a first end connected to the DC voltage positive output and a second end connected to the output terminal P4, a resistor R12 having a first end connected to the output terminal P4 and a second end connected to the ground via a capacitor C14, a transistor Q3 having a collector connected to the anode of the SCR thyristor TH1, an emitter connected to the ground and a base connected to a cathode of a diode D14, and a resistor R13 connecting the second end of the resistor R12 to an anode of the diode D14.

5. (New) The control circuit as claimed in Claim 4, wherein the capacitor C13 of the protection circuit is to prevent interference from high frequency noises.
6. (New) The control circuit as claimed in Claim 4, wherein the capacitor C14 is to provide a by-pass so that an AC voltage from a filament is by-passed to the ground to avoid affecting the normal operation of the transistor Q3 under a normal lighting condition.